



2020 Report

For the Boone County Highway Department

2019 Accomplishments

Treatment	Length
Single Chip & Seal	11.51 miles
Double Chip & Seal	21.02 miles
Cold Mix Asphalt Resurface	2.12 miles
Conversion	4.80 miles
Tile Installation	234 linear feet
Culvert Installation	1,295 linear feet
Ditch Cleaning & Restoration	16,841 linear feet
Shoulder Clipping	6,376 linear feet
Rip Rap	591.79 ton



Colfax Blacktop Fog Seal & Stripe



2019 Staff Accomplishments

- 5 Additional employees successfully became Certified Pesticide Technicians
 - Cody
 - Adam
 - Max*
 - Samm
 - John Ross*
- Note 2 of these employees will achieve their Category 6 Certification
- After 3 years, we are finally fully staffed!
- Developed PASER ratings for all of our gravel roads

Upcoming Certifications

- 3 Staff Members will obtain their Road Builder Certification in March of this year.
 - Samm Foster
 - Max Mendenhall
 - John Wilson
- Requires completion of 12 courses & 300 Hrs of training
- Will join Nick Parr who has obtained his Road Builder Certification in 2018



2019 Contracted Work

Treatment	Length / Unit
Crack fill	30.3 miles
Microsurfacing	11.4 miles
Hot Mix Asphalt Resurfacing	8.64 miles
Bridge Rehabilitation (Federal Aid)	1
Historic Bridge Repair	1



**Holliday Road Bridge
Repair**



2019 Report Card

How are we doing?





Work Order Statistics

	2016	2017	2018	2019	Total
Animals	6	11	18	17	52
Brush/Mowing	62	152	131	112	457
Drainage	29	198	140	151	518
Gravel Road Maintenance	95	120	128	112	455
Potholes/Patching	92	167	105	148	512
Signs	118	211	249	249	827
Trash	59	72	63	61	255
Other	80	87	78	61	306
Total =	541	1018	912	911	3382
Total Completed	541	1016	895	850	3302
	100.0%	99.8%	98.1%	93.3%	97.6%

Road Conditions



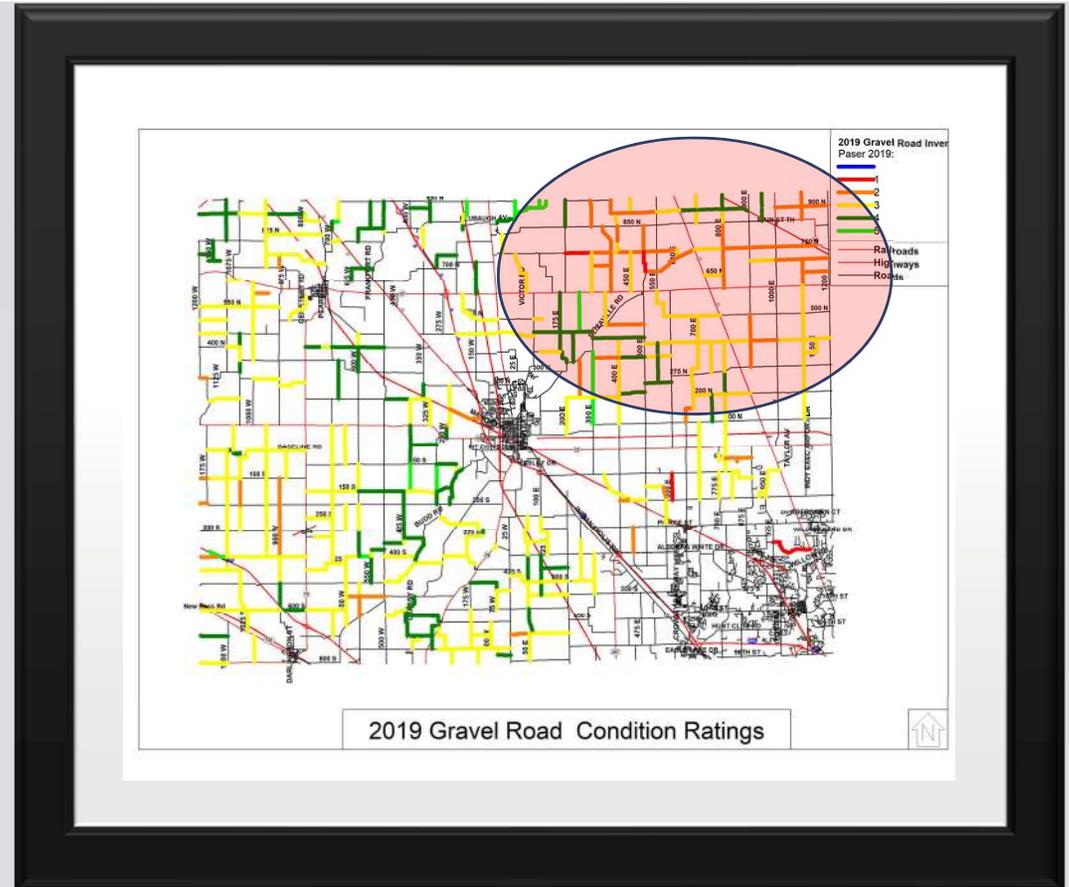
PASER RATINGS



The investment is paying off!

2019 Gravel Road PASER Ratings

- Overall average rating is 3.11 on a scale of 5
- Rating allows us to see where we need to focus our efforts in 2020 and 2021



Bridge Conditions

No. of Bridges		Average Age	
Statewide Average	144	Statewide Average	44
Boone County	190 	Boone County	52 yrs 
Load Posted Bridges		Bridges > 50 Years Old	
Statewide Average	11.5%	Statewide Average	31.3%
Boone County	14.2% 	Boone County	46.8% 
Sufficiency Rating < 50		Bridges Recommended for Replacement	
Statewide Average	7.3%	Statewide Average	9%
Boone County	8.4% 	Boone County	15% (28 Bridges) 

Boone County Highway Department

Vision

*To help all users of
Boone County's
transportation system to
reach their destination
safely.*

Boone County Highway Department

Mission

Eliminate fatal and serious injuries resulting from traffic crashes, making decisions based on their ability to reach zero deaths on Boone County's transportation system.



2019 Safety Report Card (Highway System)

	LRSP Data (5 years)		2019	
Total Crashes	988	-	229	
Fatal Crashes	4	0.4%	1	0.4%
Injury Crashes	166	16.8%	22	9.6%
Roadway Departure Crashes	499	50.5%	86	37.6%
Animal Crashes	95	9.6%	25	10.9%
Angle/Left Turn Crashes	133	13.5%	23	10.0%
Rear-end Crashes	68	6.9%	11	4.8%
Dark Roadway Crashes	418	42.3%	90	39.3%
Wet Roadway Crashes	367	37.1%	87	38.0%
Horizontal Curve Crashes	228	23.1%	36	15.7%
Intersection Crashes	406	41.1%	37	16.2%
Gravel Roadway Crashes	80	8.1%	15	6.6%

Bridge Safety

- The estimated replacement cost of the 28 bridges recommended for replacement is \$24,000,000
- 5 Year plan is fiscally constrained and does not meet needs
- Bridge inspections continue to uncover critical findings that require immediate (and expensive) action
- Budget does not support the cost of a large culvert inventory to identify the size of need



Bridge #217 – Emergency replacement necessary

Small Structure Safety



- Last county-wide inspection performed in 2014. Have not had the funds to update.
- Unlike bridges, small structure inspection costs are not matched with federal funds
- The 2014 Countywide small structure inspection report inspected 341 structures
- 33 structures were listed as “poor” or “severe” condition



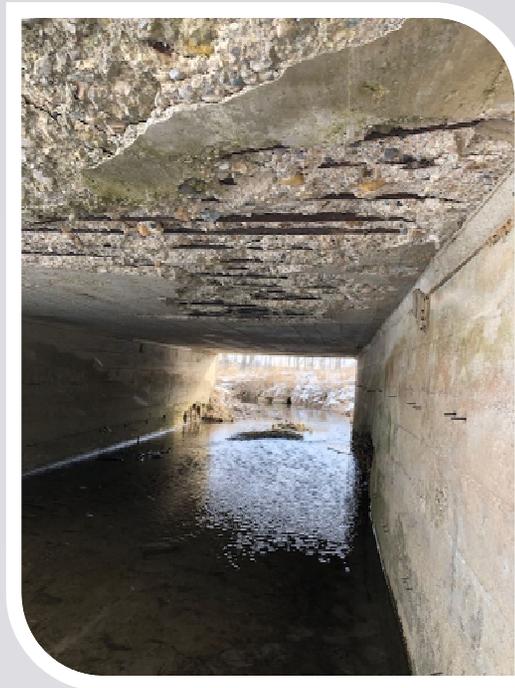
900W South of 100S



50E E of SR 75

Small Structure Safety

- 7 structures on the top 25 priority list have not yet been replaced
- 15 structures listed as poor in 2014 still need replaced
- An additional 65 structures had an estimated remaining life of 10 years or less in 2014
- 61 of the 65 are not CMP pipes that can be replaced by County forces
- 23 of the 65 have spans greater than 10'



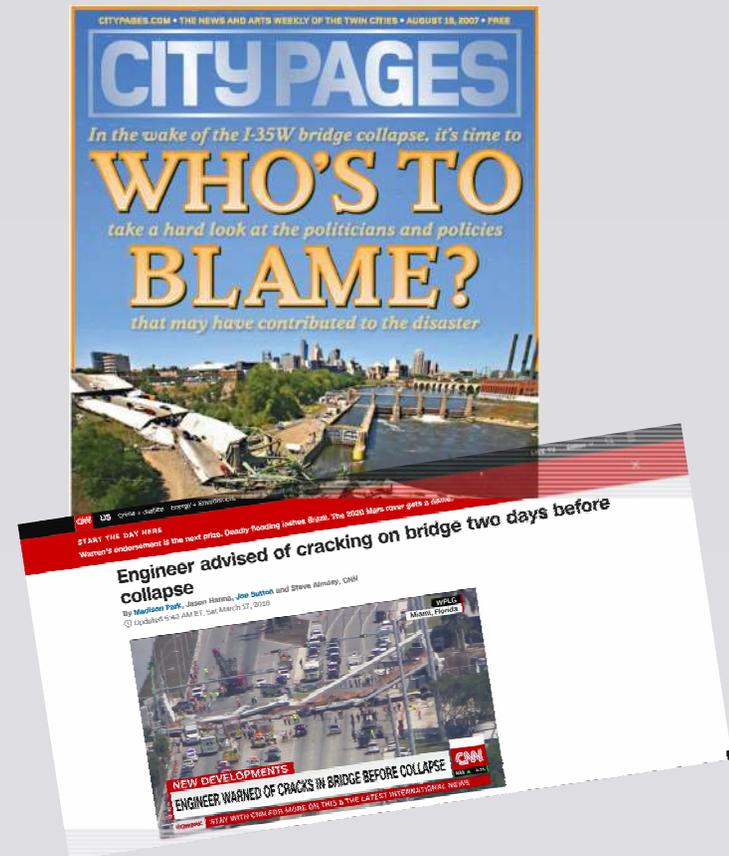
400E N of 750N



200S E of SR 75

Is this really a big deal?

- Indiana Administrative Code 864, Rule 11 – Professional Conduct of Professional Engineers
 - Establishes requirements concerning ethical, economic, and legal principles and unprofessional conduct in the practice of engineering.
 - [It is assumed that a licensed engineer] is knowledgeable of the Act and Rules of the [professional engineering licensing] board.
 - [A licensed engineer agrees] to abide by the Act and Rules
 - [A licensed engineer understands] that the practice of engineering is a privilege.
 - **Primary obligation is to protect the safety, health, and welfare of the public.**



Is this really a big deal?

- Bridges and culverts are a critical piece of our county's infrastructure
- Many of the deficiencies aren't visible from the user's eyes
- Bridge and small structure restrictions create major disruption to commerce
 - Agricultural users
 - Businesses
 - Residents
 - Development (routing for heavy loads necessary for construction)
- In some situations, it may become necessary to consider closing bridges & small structures for the safety, health, and welfare of the public

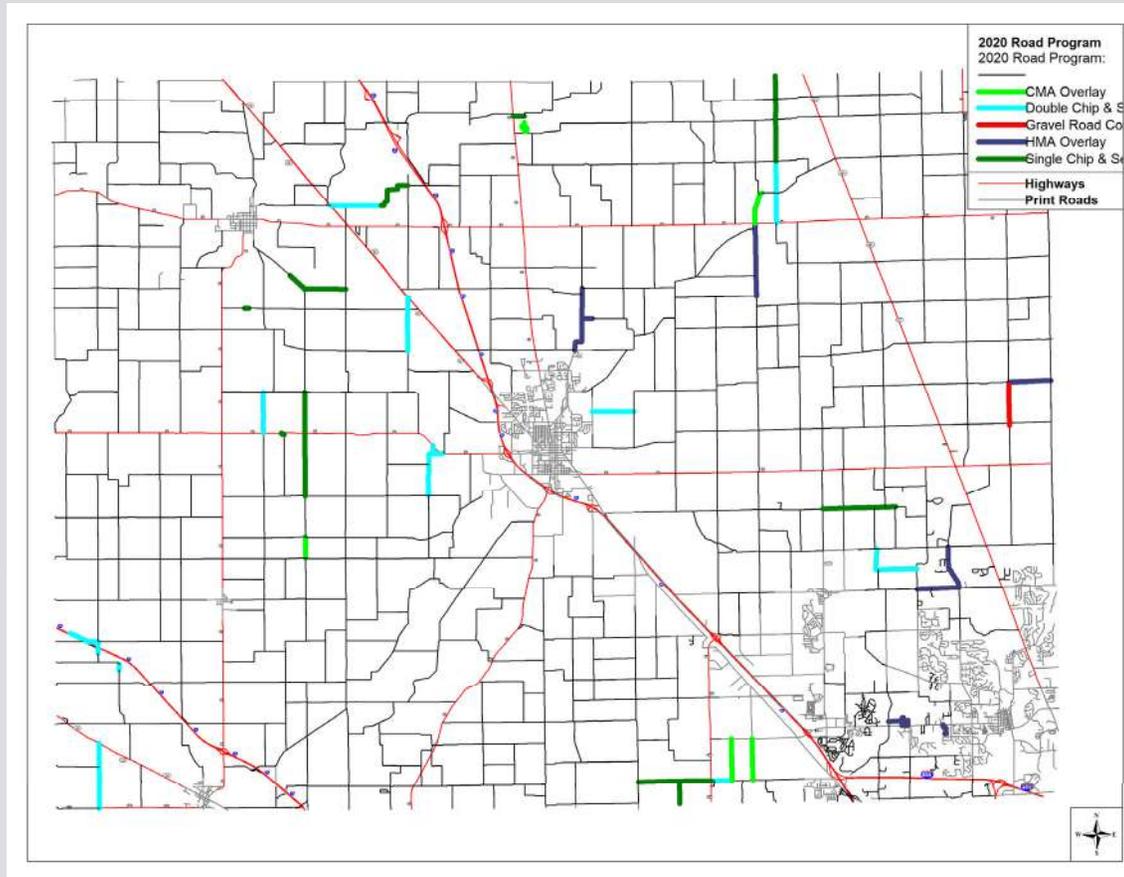




2020 Summer Road Program

Treatment	Length
Single Chip & Seal	12.59 miles
Double Chip & Seal	11.81 miles
Cold Mix Asphalt Resurface	3.93 miles
Conversion	1.00 miles

2020 Summer Road Program





2020 Planned Contracted Work

Treatment	Length / Unit
Crack fill	Approximately 25 miles
Microsurfacing	Approximately 6 miles
Hot Mix Asphalt Resurfacing	7.55 miles
Bridge 161 Reconstruction	1
Large Culvert Replacement	2
Bridge 174 & 175 Replacement (2020 or 2021 Construction)	2
Bridge 217 Replacement (2020 or 2021 Construction)	1
Bridge 311 Rehabilitation (2021 Construction)	1



2019 vs. 2020 Summer Road Program

2019 Program

Treatment	Miles
Single Chip & Seal	11.51
Double Chip & Seal	21.02
CMA Resurface	2.12
Conversion	4.80
TOTAL =	39.5

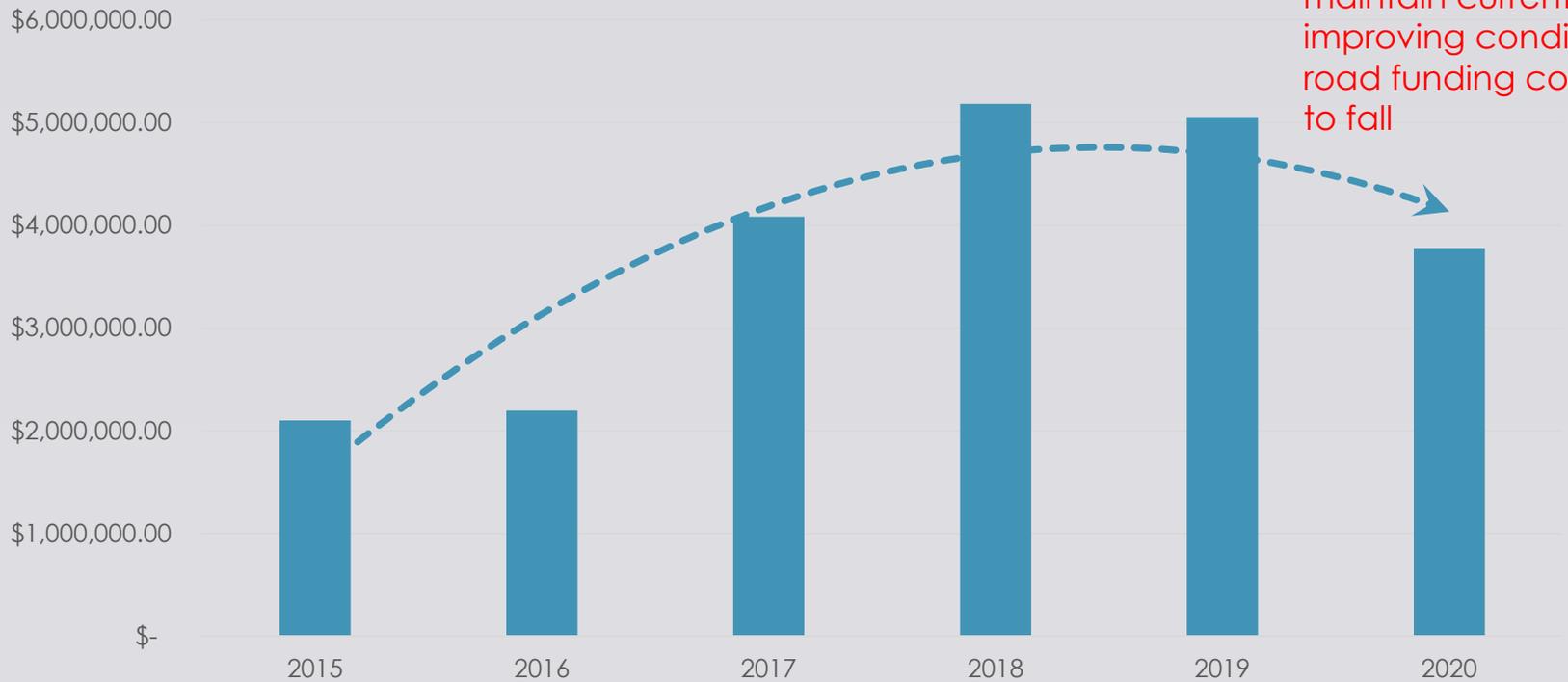
2020 Program

Treatment	Miles
Single Chip & Seal	12.59
Double Chip & Seal	11.81
CMA Resurface	3.93
Conversion	1.00
TOTAL =	29.33

Road Funding



Annual Road Program Budget



It will be difficult to maintain current trend of improving conditions if road funding continues to fall

Bridge Funding (1986- 2019)



*Peak in 2015 due to bond issue deposited into Cumulative Bridge

**Peak in 2019 due to Community Crossings reimbursements

Bridge Funding



	1986	1996	2006	2016	2019
Cumulative Bridge Tax Receipts	\$467,507.45	\$900,429.13	\$1,144,299.47	\$647,841.23	\$672,864.09
*2019 Buying Power	\$1,073,697.40	\$1,467,932.75	\$1,452,515.93	\$688,300.54	\$672,864.09

Nearly \$400,000 less buying power in 2019 than in 1986

*Based on US Bureau of Labor Statistics CPI Inflation Calculator

Bridge Funding Comparison (2018)

Category	Boone County	Statewide Average	Ranking
Number of bridges	189	142	15 th
Assessed Value	\$4,950,708,331	\$2,753,534,492	14 th
Cumulative Bridge Rate	0.0125	0.0303	75 th
Cumulative Bridge Levy Collected	\$618,839	\$607,415	28 th
*Dollars Collected per bridge	\$3,274	\$5,456	52 nd

*Includes Major Bridge Funds

Data source: Indiana LTAP

Bridge Funding Comparison (\$250,000 Increase)

Category	Boone County	Statewide Average	Ranking
Number of bridges	189	142	15 th
Assessed Value	\$4,950,708,331	\$2,753,534,492	14 th
Cumulative Bridge Rate	0.0175	0.0304	73 rd
Cumulative Bridge Levy Collected	\$868,839	\$610,133	19 th
*Dollars Collected per bridge	\$4,597	\$5,471	38 th

*Includes Major Bridge Funds

Data source: Indiana LTAP

Bridge Funding Comparison (\$500,000 Increase)

Category	Boone County	Statewide Average	Ranking
Number of bridges	189	142	15 th
Assessed Value	\$4,950,708,331	\$2,753,534,492	14 th
Cumulative Bridge Rate	0.0226	0.0305	64 th
Cumulative Bridge Levy Collected	\$1,118,839	\$612,850	14 th
*Dollars Collected per bridge	\$5,920	\$5,485	26 th

*Includes Major Bridge Funds

Data source: Indiana LTAP

My Commitment

- Continue seeking additional fund sources for Boone County
 - Community Crossings grants
 - Federal Highway Funds
 - Improved legislation
 - Federal Highway Safety Improvement Program Funds
- Work with AIC and legislators to rectify Local Roads & Streets distribution
- Work with INDOT to improve collaboration between the State and local municipalities
- Work with Federal Elected officials to reduce the delays associated with utilizing federal funds on infrastructure projects



Questions?

